

**REMARKS****INTRODUCTION:**

In accordance with the foregoing, claims 1, 7 and 14 have been amended, and claim 16 has been added. No new matter is being presented, and approval and entry are respectfully requested.

Claims 1-16 are pending and under consideration. Reconsideration is respectfully requested.

**CHANGES TO THE SPECIFICATION:**

The specification was objected to for informalities. The specification has been reviewed in response to this Office Action. Changes have been made to the specification only to place it in preferred and better U.S. form for issuance and to resolve the Examiner's objections raised in the Office Action. The terminology "L" for lumens has been changed to "lm." A Substitute Specification (Clean Version) and a Substitute Specification Showing Changes (Marked-up Version) are enclosed. The Substitute Specification contains no new matter.

**CLAIM OBJECTIONS:**

Claim 1 was objected to because of informalities.

Claim 1 has been amended to recite, in part, "a supporting member disposed at a predetermined position to detect an ink level and to detect when ~~an~~ the ink level is decreased below a predetermined level." Thus, amended claim 1 is submitted to be in allowable form.

**REJECTION UNDER 35 U.S.C. §102:**

In the Office Action, at pages 3-4, claims 1, 2, 5, 6 and 14 were rejected under 35 U.S.C. §102(b) as being anticipated by Saito et al. (USPN 5,689,290; hereafter, Saito). This rejection is traversed and reconsideration is requested.

Claims 1 and 14 have been amended to recite, in part: "a luminous member comprising a *self-luminous* material and supported by the supporting member, wherein the luminous member is capable of emitting light without using a powered light source." A self-luminous material emits a glow in dark conditions without prior exposure to light and contains radioactive elements as activators. Saito recites a light-emitting diode that is powered, as is known to those skilled in the art, electrically to emit light and does not recite using a self-luminous material. Thus, Saito fails to discuss a luminous member comprising a self-luminous material and supported by the supporting member, wherein the luminous member is capable of emitting light without using a

powered light source and does not anticipate the invention recited in claims 1 and 14.

Since claims 2, 5, and 6 depend from amended claim 1, claims 2, 5 and 6 are submitted not to be anticipated under 35 U.S.C. §102(b) by Saito et al. for at least the reasons that amended claim 1 is submitted not to be anticipated under 35 U.S.C. §102(b) by Saito et al.

#### **REJECTION UNDER 35 U.S.C. §103:**

A. In the Office Action, at pages 5-7, claims 3, 4, 7-13 and 15 were rejected under 35 U.S.C. §103(a) as being obvious over Saito (USPN 5,689,290; hereafter, Saito) in view of Wirthlin (Pub. US 2001/0022342 A1; hereafter, Wirthlin). The reasons for the rejection are set forth in the Office Action and therefore not repeated. The rejection is traversed and reconsideration is requested.

It is respectfully submitted that Saito fails to discuss a luminous member that is capable of emitting light without using a powered light source, as is recited in amended claims 1 and 14. Thus, amended claims 1 and 14 are submitted to be non-obvious under 35 U.S.C. §103(a) over Saito. Since claims 3, 4 and 15 depend from amended claims 1 and 14, respectively, claims 3, 4 and 15 are submitted to be non-obvious under 35 U.S.C. §103(a) over Saito for at least the reasons that amended claims 1 and 14 are submitted to be patentably distinguishable under 35 U.S.C. §103(a) over Saito.

Wirthlin does not discuss using a self-luminous material, as is recited in amended claims 1 and 14. Also, FIGs. 1 and 3 of Wirthlin show an electrical connection for the light source. Also, FIGs. 14 and 15 of Wirthlin show a connector plug 478 (see paragraph 106 of Wirthlin) that supplies power. In contrast, amended claims 1 and 14 recite a luminous member comprising a self-luminous material and supported by the supporting member, wherein the luminous member is capable of emitting light without using a powered light source. A self-luminous material emits a glow in dark conditions without prior exposure to light and generally contains radioactive elements as activators. Thus, the light source of Wirthlin does not discuss "a luminous member comprising a self-luminous material and supported by the supporting member, wherein the luminous member is capable of emitting light without using a powered light source," as is recited in amended claims 1 and 14. Hence, it is respectfully submitted that amended claims 1 and 14 are not discussed by, and are patentably distinguishable over, Wirthlin under 35 U.S.C. §103(a). Since claims 3, 4 and 15 depend from amended claims 1 and 14, respectively, claims 3, 4 and 15 are submitted to be non-obvious over Wirthlin under 35 U.S.C. §103(a) for at least the reasons that amended claims 1 and 14 are submitted to be non-obvious over Wirthlin under 35 U.S.C. §103(a).

It is respectfully submitted that the courts have held that the Examiner may not suggest modifying references using the present invention as a template absent a suggestion of the desirability of the modification in the prior art. *In re Fitch*, 23 U.S.P.Q.2d 1780, Fed Cir. 1992. Something in the prior art as a whole must suggest the desirability, and thus, the obviousness, of making the combination. *Alco Standard Corp. v. Tennessee Valley Authority*, 808 F. 2d 1490, 1 U.S.P.Q. 2d 1337 (Fed. Cir. 1986). When a rejection depends on a combination of prior art references, there must be some teaching, suggestion or motivation to combine the references. *In re Geiger*, 815 F.2d 686, 688 2 U.S.P.Q.2d 1276, 1278 (Fed. Cir. 1987). Thus, since there is no teaching or suggestion of combining Saito with Wirthlin. it is respectfully submitted that claims 1, 3, 4, 14 and 15 are patentable over Saito and/or Wirthlin, alone or in combination, since even if combined, Saito and Wirthlin do not discuss claims 1, 3, 4, 14 and/or 15.

Amended independent claim 7 recites "an inkjet printer comprising an ink level detecting device, the inkjet printer comprising: a photo detector; and an ink level detecting device detecting an amount of residual ink in the printer using the photo detector, and comprising a luminous member comprising a self-luminous material or a material with ~~fluorescent or luminous paints~~ paint to detect when a level of ink is lower than a predetermined level during a printing operation without a separate powered light source. As admitted by the Examiner, Saito does not disclose a luminous member comprising a self-luminous material or a material with fluorescent or luminous paints to detect when a level of ink is lower than a predetermined level during a printing operation without a separate light source. Wirthlin does not recite using a self-luminous material and only recites a light source 54, which is illustrated numerous times as being connected to a power source. Wirthlin does not discuss using a self-luminous material or a material with luminous paint to detect when a level of ink is lower than a predetermined level during a printing operation without a separate powered light source. As noted above, there is no teaching or suggestion of combining Saito and Wirthlin. Thus, it is respectfully submitted that amended claim 7 is patentably distinguishable under 35 U.S.C. §103(a) over Saito and/or Wirthlin, alone or in combination.

Since claims 8-13 depend from amended claim 7, claims 8-13 are submitted to be non-obvious under 35 U.S.C. §103(a) over Saito and/or Wirthlin, alone or in combination, for at least the reasons that amended claim 7 is submitted to be patentably distinguishable under 35 U.S.C. §103(a) over Saito and/or Wirthlin, alone or in combination.

B. In the Office Action, at pages 7-8, claims 8 and 9 were rejected under 35 U.S.C. §103(a) as being unpatentable over Saito (USPN 5,689,290; hereafter, Saito), as applied to claim 7, and further in view of Denton et al. (USPN 6,293,143; hereafter, Denton). The reasons for the rejection are set forth in the Office Action and therefore not repeated. The rejection is

traversed and reconsideration is requested.

Claim 7 has been amended to delete the terminology "fluorescent or."

For the reasons recited above in A, it is respectfully submitted that amended claim 1 is patentable over Saito under 35 U.S.C. §103(a). Since claims 8 and 9 depend from amended claim 1, claims 8 and 9 are submitted to be patentable over Saito under 35 U.S.C. §103(a) for at least the reasons that amended claim 1 is submitted to be patentable over Saito under 35 U.S.C. §103(a).

It is respectfully submitted that Denton discusses the use of a fluorescent material in an ink chamber in sensing an ink level in an ink cartridge. However, Denton does not discuss using a self-luminous material or a material with luminous paint to detect when a level of ink is lower than a predetermined level during a printing operation without a separate powered light source, as is recited in amended claim 7.

It is respectfully submitted that there is no discussion of combining Saito and Denton, and that even if combined, Saito and Denton would be patentably distinguishable over amended claim 7. Thus, it is submitted that amended claim 7 is patentable over Saito and/or Denton, alone or in combination, under 35 U.S.C. §103(a). Since claim 8 and 9 depend from amended claim 7, claims 8 and 9 are submitted to be patentable over Saito and/or Denton, alone or in combination, under 35 U.S.C. §103(a), for at least the reasons that amended claim 7 is submitted to be patentable over Saito and/or Denton, alone or in combination, under 35 U.S.C. §103(a).

#### **CONCLUSION:**

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot, and further, that all pending claims patentably distinguish over the prior art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited.

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for a telephone interview to discuss resolution of such issues.

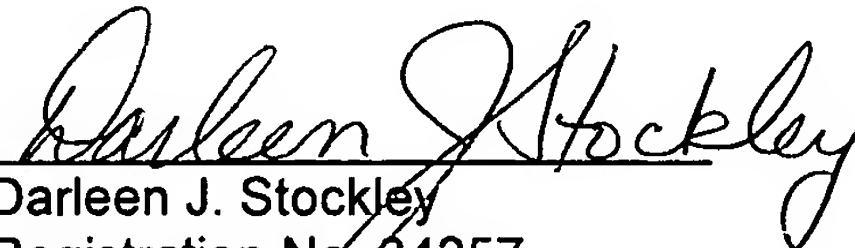
Ser. No. 10/652,489

Docket No. 1349.1259

If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: April 21, 2005 By:   
Darleen J. Stockley  
Registration No. 34257

1201 New York Avenue, N.W.  
Suite 700  
Washington, D.C. 20005  
Telephone: (202) 434-1500  
Facsimile: (202) 434-1501